

#### Accelerate time to value by migrating Big Data workloads to Azure Databricks



#### Chapter 1:

Be first to value with Azure Databricks



#### **Chapter 2:**

Integrate seamlessly into the Azure ecosystem



#### **Chapter 3:**

Collaborate securely and access your data anywhere

Speakers:



Arindam Chatterjee Principal Group Product Manager, Microsoft



Premal Shah
Principal Program Manager,
Microsoft

#### Chapter 1

# Be first to value with Azure Databricks

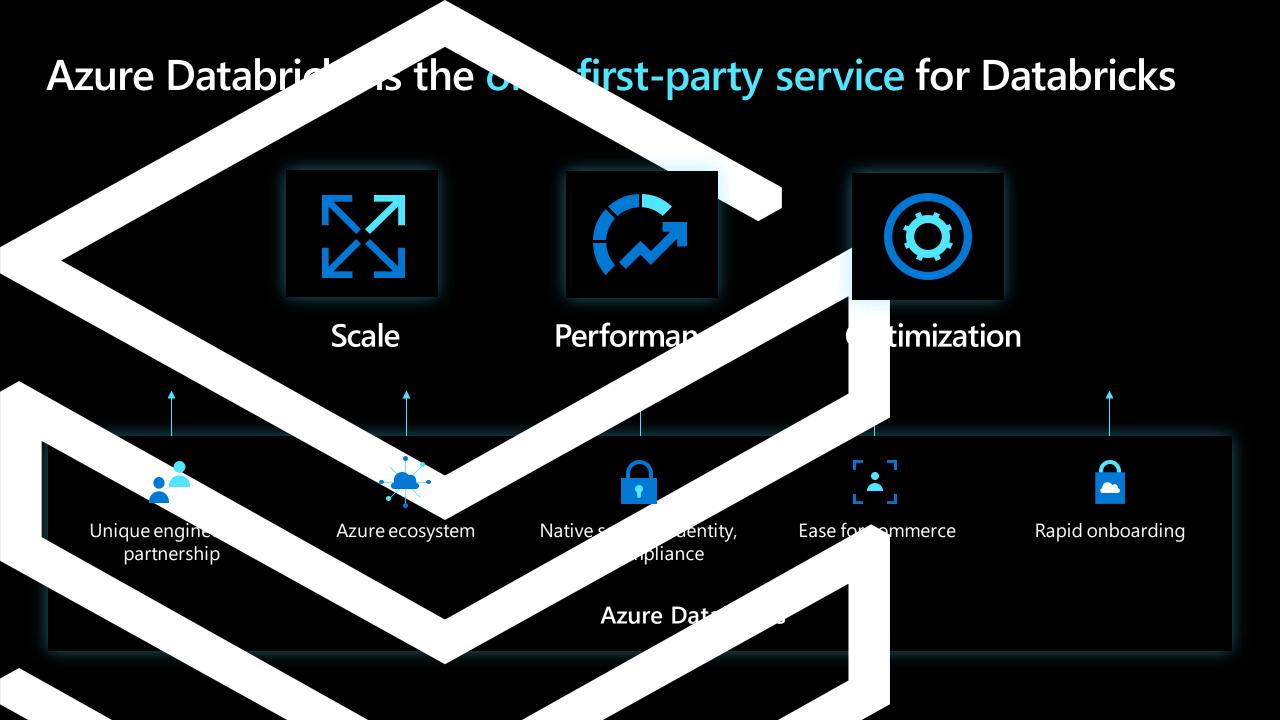


Arindam Chatterjee Principal Group Product Manager, Microsoft



## Big data workloads need robust support





# Microsoft and Databricks engineering teams are aligned to accelerate customer success

- Strong joint engineering partnership
- Streamlined product optimization
- Consistently integrated experience for customers
- Azure is the first to get the latest and greatest features

## Customer Story – LMK Group

#### Challenge

- Build an experimental, predictive food ordering and delivery system that reduces food waste to 1% (15-20% is normal in a typical grocery)
- Develop a robust, experimental model that intakes data from past orders, upcoming orders, and growth forecasts
- Translate data into meaningful predictions for produce growers so they can plan planting schedules that minimize food waste

When a merger doubled the company's size, **its existing cloud infrastructure no longer sufficed**, so LMK Group moved to Azure

#### Solution

- Azure Databricks was chosen as the model training entity because it offers the ability to serve once-a-night model scorings and live scorings for future models
- LMK Group built a complete stack with the model hosted and run on Azure Databricks, while APIs trigger and harvest results

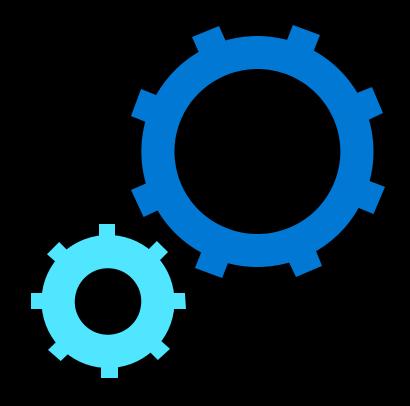


#### Chapter 2

# Integrate seamlessly into the Azure ecosystem



Premal Shah Principal Program Manager, Microsoft



## Backed by Azır

# Azure ecosystem

#### Utilize all Azur offer:

Azure Party service on Azure.

- with other clouds, it is not an Azure Marketplace a 3<sup>rd</sup> party hosted service.
- atabricks is integrated seamlessly with Azure services:
- Azure Portal
- Azure Storage Services
- Azure Active Directory
- Azure Synapse Analytics and Azure Cosmos DB
- Apache Kafka for HDInsight
- Azure Billing
- Azure Power Bl connector

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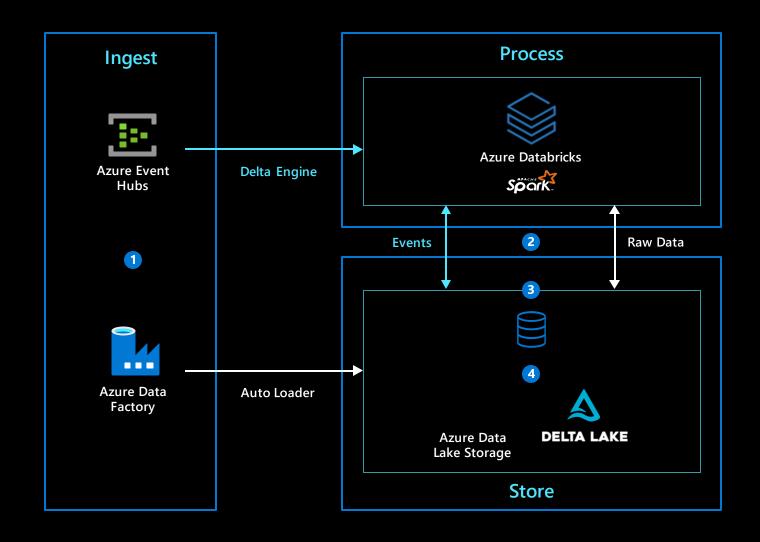
**Azure** 

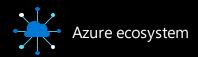
**DevOps** 



Azure Portal

## 2nd-to-end modern data architecture on Azure





# Demo

#### **Chapter 3**

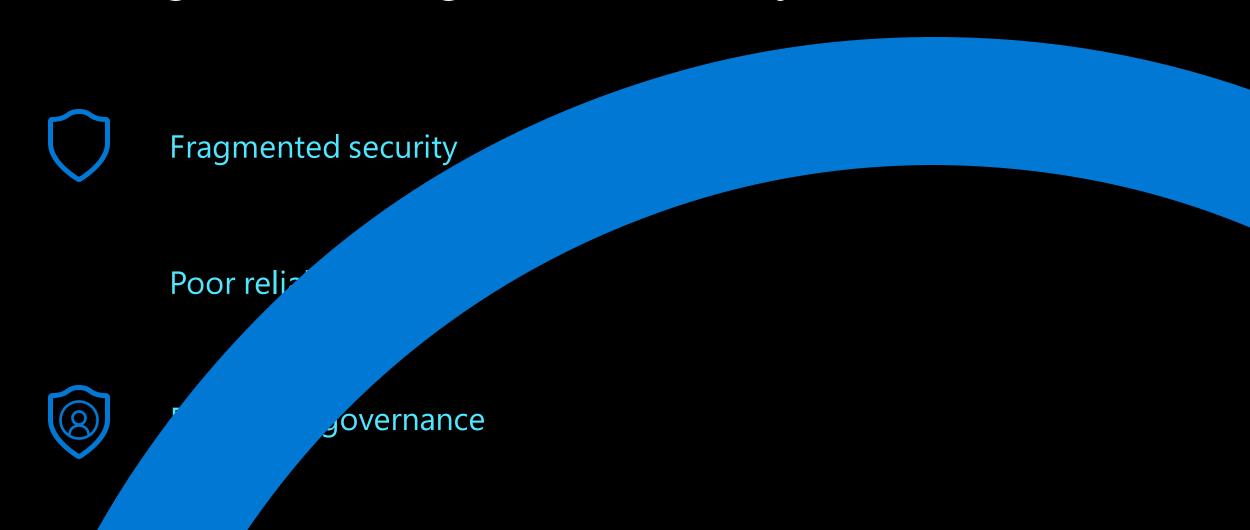
# Collaborate securely and access your data anywhere



Arindam Chatterjee Principal Group Product Manager, Microsoft



# Challenges of Securing Data and Al Projects



According to enterprise executives and data experts, the biggest barrier to effective use of data and analytics is a perceived lack of security.

# **Enterprises want:**

- Simple identity workflows
- Guaranteed customer-controlled data protection
- Network customization
- Trusted compliance certifications

Private, secure, encrypted with compute in your network

Plug into your identity system for seamless control

**Network Security** 

**Identity and Access** 

Compliance

**Data Protection** 

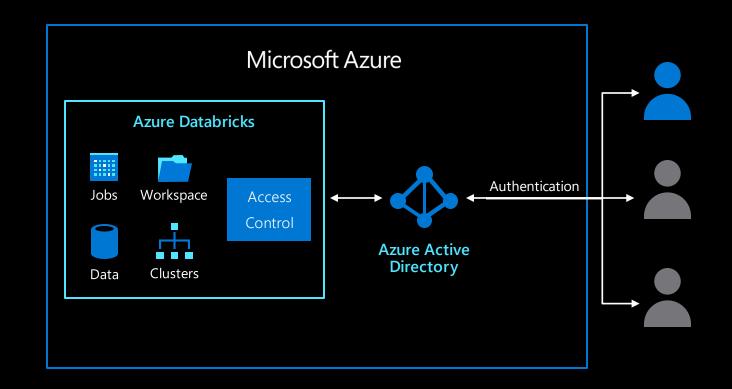
Battle tested for compliance and other sensitive data policies

Extend identity all the way down to the data natively

## Azure Databricks integration with AAD

Azure Databricks is integrated with AAD—so Azure Databricks users are just regular AAD users

- No need to define users and their access control separately.
- AAD users authenticate directly into Azure Databricks for user-based access control.
- Databricks integration with AAD enables single sign on (SSO), and unified authentication.



#### Secure collaboration

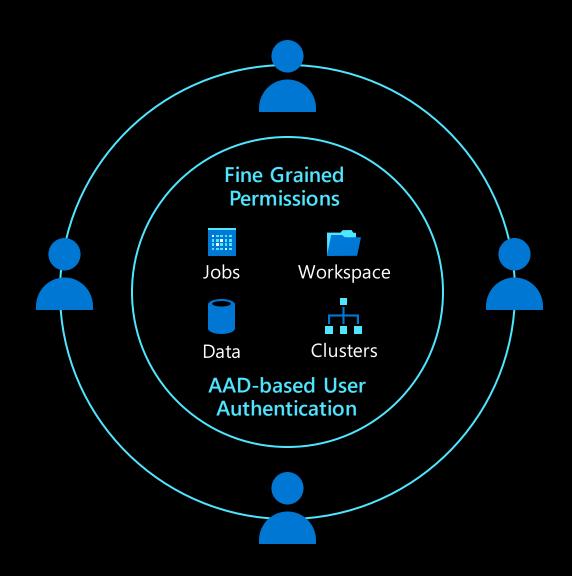
Azure Databricks enables secure collaboration between colleagues

- With Azure Databricks, colleagues can securely share key artifacts such as Clusters, Notebooks, Jobs and Workspaces
- Secure collaboration is enabled through a combination of:

**Fine grained permissions:** Defines who can do what on which artifacts (access control)



**AAD-based authentication:** Ensures that users are who they claim to be

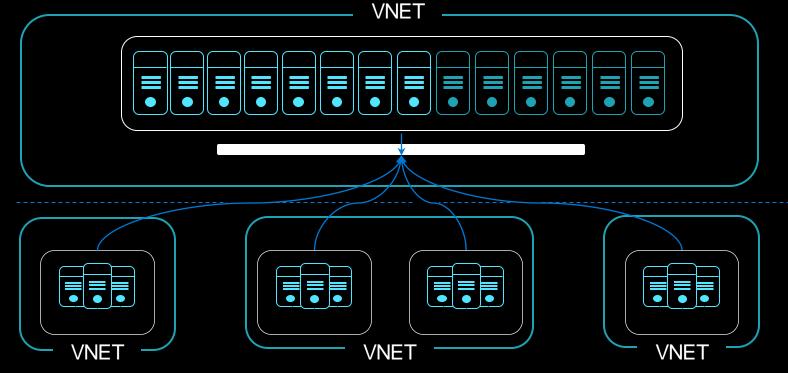


## ed Analytics on Azure Databricks

Azure
Databricks
Control Plane

Encrypted communications

Data plane in enterprise managed VNets



Control plane designed to scale beyond enterprise needs

The data plane runs in enterprise governed infrastructure

Data always stays in enterprise data sources, no transfer of data needed







#### Summary

- Secure by design
- Azure Databricks has you covered
  - Network Security
  - Identity and Access
  - Data Protection
  - Compliance

# Customers using Azure Databricks experience continual ROI throughout the journey

Up to 417% ROI over 3 years

**▲**\$9.9M

Incremental profit with improved ML models

**5**%

Increased revenue through faster data science outcomes

**25**%

Faster time to market with improved data productivity

<sup>\*</sup> Forrester, April 2020, "The Total Economic Impact™ Of The Databricks Unified Data Analytics Platform"

#### Next steps



Learn more about Azure Databricks: <a href="mailto:aka.ms/Learn-Azure-Databricks">aka.ms/Learn-Azure-Databricks</a>



Get started with Azure Databricks now: <a href="mailto:aka.ms/ADB-free-trial">aka.ms/ADB-free-trial</a>



Send feedback here: aka.ms/ADB-feedback

#### Join Azure Databricks Quickstart Hands-on Lab

Master the fundamentals of Azure Databricks with hands-on learning



Hands-on webinar

#### Azure Databricks Quickstart Labs

- An overview of Azure Databricks
- How to process and analyze your data with Azure Databricks
- How to use the Azure Databricks workspace, notebooks, and cluster management
- Tips and tricks for cost savings and efficiency

Visit: <u>aka.ms/ADB-events</u>



